



Application No.: 08/676,355

In the claims:

Cancel claims 1-29 and add the following new claims:

30. (New) A method of determining and providing radio signals and data relating to radio signals receivable at an actual receiving site, comprising the steps of:

utilizing local data in a radio system wherein receiving sites in a given receiving area are covered by at least one transmitter;

utilizing, for determining data about radio signals receivable at the actual receiving site, at least one first list containing data about radio signals receivable in principle in the given receiving area;

associating at least one signal with the data in the at least one first list and relating to radio signals transmitted by the at least one transmitter;

utilizing at least one second local list for the selection of all radio signals receivable at the actual receiving site and data in the at least one first list relating to such radio signals, said at least one second list containing for a given partial area of the receiving area the signals associated with the data relating to radio signals receivable in the partial area;

and directly providing on the basis of the data provided a radio signal selected from all of the radio signals receivable at the actual receiving site.

31. The method of claim 30, further comprising the step of determining and utilizing as local data local coordinates of the actual receiving site.

32. The method of claim 31, further comprising the step of determining the data by radio signals actually receivable at the actual receiving site.

33. The method of claim 30, wherein the data relating radio signals in principle receivable within a receiving area covered by at least one transmitter is transmitted by the at least one transmitter.

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34. The method of claim 33, further comprising the step of storing in a receiver the data relating to radio signals in principle receivable in a receiving area covered by the at least one transmitter.

35. The method of claim 34, further comprising the step of exchanging only information stored in the receiver which is affected by changes of radio signals receivable within a receiving area covered by at least one transmitter.

36. The method of claim 30, wherein the data in the at least one first list receivable as a function of the actual receiving site is transmitted by the at least one transmitter.

37. The method of claim 36, further comprising the step of storing in a receiver the data in the at least one list receivable as a function of the actual receiving site.

38. The method of claim 37, further comprising the step of exchanging, when changing from a first receiving site to a new receiving site, only data relevant to the new receiving site which differs from data relating to the first receiving site.

39. The method of claim 30, further comprising the steps of actualizing the data relating to radio signals receivable in a receiving site covered by at least one transmitter in one transmission cycle and of repeatedly actualizing data relating to radio signals in the at least one first list and receivable as a function of the actual receiving site.

40. The method of claim 30, wherein the second local lists containing for a given partial area of the receiving area the signals associated with the radio signals receivable in the partial area are compiled to a single list.

41. The method of claim 30, further comprising the steps of determining from a

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plurality of local lists the second local list valid for an actual receiving site by local data relating to the actual receiving site and of selecting with the second list from the at least one first list the data relating to all radio signals receivable at the actual receiving site.

42. The method of claim 30, further comprising the steps of associating numbers as signals to the data relating to radio signals receivable in principle in a receiving area covered by at least one transmitter, whereby the local list is compiled of sequences of the numbers.

43. The method of claim 42, wherein the data relating to radio signals receivable in principle within a receiving area covered by at least one transmitter and the associated numbers are transmitted by the at least one transmitter.

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cont.
44. The method of claim 42, wherein the data relating to radio signals receivable in principle within a receiving area covered by at least one transmitter and the associated numbers are stored in a receiver.

45. The method of claim 30, wherein the data in the at least one first list of radio signals receivable as a function of the actual receiving site are transmitted by the at least one transmitter as sequences of numbers.

46. The method of claim 30, wherein the data in the at least one first list of radio signals receivable as a function of the actual receiving site are stored in a receiver.

47. The method of claim 30, wherein the data relating to radio signals in principle receivable in a receiving area covered by at least one transmitter and the data relating to radio signals in the at least one first list receivable as a function of the actual receiving site include frequency bands, channels and frequency blocks in addition to at least one of a currently received frequency band, channel and

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frequency block.

48. The method of claim 30, further comprising the step of at least approximatively determining the actual receiving site by one of utilizing identification signals relating to the transmitter site transmitted by the at least one transmitter and a phase comparison hyperbolic position fixing process.

49. The method of claim 30, further comprising the step of determining the actual receiving site by a satellite navigation system.

50. The method of claim 30, wherein the same radio signals are receivable at each site within a partial area associated with a second local list and pertaining to a receiving area covered by the at least one transmitter.

51. The method of claim 30, wherein for an actual receiving site in a partial area transmitters transmit the data relating to radio signals receivable in the partial area and an adjacent area.

52. The method of claim 30, wherein for an actual receiving site in a partial area the data relating to radio signals receivable in the partial area and an adjacent area are stored in a receiver at the actual receiving site.

53. The method of claim 52, wherein during change from a receiving site to a further receiving site in an adjacent partial area data relating to receivable radio signals in the adjacent partial area are stored and data relating to radio signals in partial areas no longer adjacent to the further receiving site are removed from the storage.

54. The method of claim 53, further comprising the step of utilizing data relating to

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directional movement prior to arrival at the further receiving site for accelerating the exchange of data in the storage.

55. The method of claim 30, wherein the radio signal in the radio system comprise at least one of receivable program signals, types of programs and transmitters.

56. The method of claim 30, wherein the data relating the radio signals in principle receivable in a receiving area covered by the at least one transmitter is compiled in a single list.

57. An apparatus for determining and providing radio signals and data relating to radio signals receivable at an actual receiving site by the utilization of local data in a radio system, comprising:

means for determining data relating to radio signals in principle receivable in a receiving area covered by at least one transmitter;

at least one first list containing the data and at least one identifying signal associated in the at least one list with the data relating to the radio signal transmitted by the at least one transmitter;

means for selectively switching between an automatic and manual determination of data relating to the actual receiving site;

first storage means for storing at least one second local list containing identifying signals associated with the data relating to radio signals receivable in a given partial area of a receiving area;

control means for selecting from the at least one first list on the basis of local data and identifying signals from the first storage all valid data relating to radio signals receivable at an actual receiving site; and

means for indicating the data valid for the actual receiving area.

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58. The apparatus of claim 57, wherein the control means determines the local list valid for the actual receiving site on the basis of local data and on the basis of the determined local list selects the data relating the radio signals receivable at the actual receiving site from the at least one first list.

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59. The apparatus of claim 57, wherein the storage is a random access memory (RAM).

60. The apparatus of claim 57, further comprising one of an antenna and a further storage for receiving and storing data relating to radio signals in principle receivable in a receiving area covered by the at least one transmitter.

61. The apparatus of claim 57, wherein the principle further comprising means for indicating is manually controllable and comprises one of video or audio display.
